

Mark Scheme (Results)

January 2012

GCE Psychology (6PS01) Paper 1 Social and Cognitive Psychology

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January 2012
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General Guidance on Marking

All candidates must receive the same treatment.

Examiners should look for qualities to reward rather than faults to penalise. This does NOT mean giving credit for incorrect or inadequate answers, but it does mean allowing candidates to be rewarded for answers showing correct application of principles and knowledge.

Examiners should therefore read carefully and consider every response: even unconventional answers may be worthy of credit.

Candidates must make their meaning clear to the examiner to gain the mark. Make sure that the answer makes sense. Do not give credit for correct words/phrases which are put together in a meaningless manner. Answers must be in the correct context.

Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the Team Leader must be consulted.

Using the mark scheme

The mark scheme gives:

- an idea of the types of response expected
- how individual marks are to be awarded
- the total mark for each question
- examples of responses that should NOT receive credit (where applicable).
- / means that the responses are alternatives and either answer should receive full credit.
- 2 () means that a phrase/word is not essential for the award of the mark, but helps the examiner to get the sense of the expected answer.
- 3 [] words inside square brackets are instructions or guidance for examiners.
- 4 Phrases/words in **bold** indicate that the <u>meaning</u> of the phrase or the actual word is **essential** to the answer.
- TE (Transferred Error) means that a wrong answer given in an earlier part of a question is used correctly in answer to a later part of the same question.
- If candidate has written answer under the wrong section within a question but has clearly indicated this (arrows etc) then please mark as candidate has indicated.

Quality of Written Communication

Questions which involve the writing of continuous prose will expect candidates to:

- show clarity of expression
- construct and present coherent arguments
- demonstrate an effective use of grammar, punctuation and spelling.

Full marks can only be awarded if the candidate has demonstrated the above abilities. Questions where QWC is likely to be particularly important are indicated "QWC" in the mark scheme BUT this does not preclude others.

Unit 1: Social and Cognitive Psychology

Section A

Question Number	Question	
1	An opportunity sample involves a group of participants	
	Answer	Mark
	A in which each person has an equal chance of being	
	selected	(1 AO3)
	B based on the population available at a given time	
	C who have willingly and specifically come forward to take part	
	D who represent each major strata or layer of the population	

Question Number	Question	
2	Sue is testing her students' dieting behaviour but thinks they may be tired. These variables may affect her results.	
	Answer	Mark
	A situational B experimenter C dependent	(1 AO3)
	D participant	

Question Number	Question	
3	A bar chart/graph is usually used for plotting	
	Answer	Mark
	A correlations	
	B groups of scores within categories	(1 AO3)
	C continuous data	
	D frequency polygons	

Question Number	Question	
4	Jim explains to Becky that her instructions for her practical are not standardised. This means that her instructions	
	Answer	Mark
	A are not the same for all participants B do not include the right to withdraw	(1 AO3)
	C are too short D are not clear enough	

Question Number	Question	
5	Megan tries to be neutral and free from bias when judging others. Her judgements are best described as	
	Answer	Mark
	A subjective B reliable	(1 AO3)
	C objective	
	D valid	

Question Number	Question	
6	An interview which has a set number of questions with freedom to follow up on some of the participants' responses is known as	
	Answer	Mark
	A an unstructured interview B a structured interview	(1 AO3)
	C a semi-structured interview	
	D an open interview	

Question Number	Question	
7	Participants who become more skilled in familiar tasks so their performance improves in later tasks have experienced the	
	Answer	Mark
	A fatigue effect	
	B boredom effect	(1 AO3)
	C random effect	
	D practice effect	

Question Number	Question	
8	In psychology, prejudice can best be defined as	
	Answer	Mark
	A following your own social conscience	(1 AO1)
	B a positive or negative attitude about people	
	C behaving badly towards someone from another group	
	D treating an individual differently based on race or sex	

Question Number	Question	
9	According to Levels of Processing, which of the following techniques would give the best recall?	
	Answer	Mark
	A Raza learns and recalls words in the same environment.	(1 AO1)
	B Gill retraces her steps in order to find something.	
	C Simon repeats what he needs from the supermarket over and over.	
	D Zain rewrites his revision notes and gets his mum to test him.	

Question Number	Question	
10	Which of the following might be best explained using social psychology?	
	Answer	Mark
	 A Friendship groups between girls and boys. B Processing information from your mobile phone. C Memory of your first day of school. D Dreaming about winning the lottery. 	(1 AO1)

Question Number	Question	
11	Which two of the following best define cognitive psychology?	
	Cognitive psychology is concerned with	
	Answer	Mark
	A how the mind processes information	
	B the effects of groups on behaviour C how the nervous system works	(2 AO1)
	D why we remember and forget	
	E cultural differences	

Section B

Question Number	General Instructions
12	Marking points are indicative, not comprehensive and other points should be credited. In each case consider 'or words to that effect'. Each bullet point is a marking point unless otherwise stated, and each point made by the candidate must be clearly and effectively communicated.

Question Number	Question	
12(a)	Describe the aim of Godden and Baddeley's (1975) study.	
	Answer	Mark
	 To see whether words would be recalled better in the same environment or in a very different environment (1st mark) in this case the environments were on dry land and underwater (2nd mark)/eq; To investigate whether a natural environment can act as a cue for recall/eq; Look for other reasonable marking points. 	(2 AO1)

Question	
Jsing figures/data, outline the results of Godden and Baddeley's 1975) study.	
Answer	Mark
 Recall was (about) 50% higher when it took place in the same environment as learning/eq; 40%more words were forgotten if recall took place in a different environment to original learning/eq; Mean number of words recalled in the dry land learning and recall condition was 13.5 mean / 37% and 11.4 mean / 32% for underwater learning and recall/eq; This contrasted with 8.4 mean/ 23% in the underwater learning and dry land recall and 8.6 mean / 24% for dry land learning and underwater recall/eq; 	(2 AO1)
<u> </u>	 1975) study. Inswer Recall was (about) 50% higher when it took place in the same environment as learning/eq; 40%more words were forgotten if recall took place in a different environment to original learning/eq; Mean number of words recalled in the dry land learning and recall condition was 13.5 mean / 37% and 11.4 mean / 32% for underwater learning and recall/eq; This contrasted with 8.4 mean/ 23% in the underwater learning and dry land recall and 8.6 mean / 24% for dry land learning and underwater recall/eq;

Encoding	Wet	Dry
Recall		
Wet	32%- 11.4 words	24% - 8.6 words
Dry	23% - 8.4 words	37% - 13.5 words

Question Number	Question	
12(c)	Outline one strength and one weakness of Godden and Baddeley's (1975) study.	
	Answer	Mark
	2 marks for an appropriate strength and 2 marks for an appropriate weakness. If more than one strength / weakness mark all and credit best. General strengths/weaknesses without reference to the study max 1 mark each	(4 AO2)
	 Strength The study has practical applications for education advising students to improve recall by reinstating the learning context for exams/eq; 	
	 It can also be used to help police investigations by getting them to interview witnesses in the same environment to the event they saw/eq; 	
	 The study can help students with their revision by getting them to use cues to help learning/eq; (1st mark) Students can make use of contextual cues by learning and recalling in the same environment (2nd mark) 	
	 The study took place in a real life setting and so has greater ecological validity than laboratory research/eq; 	
	 The experiment was conducted in a realistic open water environment for divers (1st mark) so has higher ecological validity and results relate to real life situations/eq; (2nd mark) 	
	 The study had practical applications as it was used to advise divers working on North Sea oil rigs how to develop strategies to recall information collected on the seabed when they got back on the rigs (1st mark)/eq; by using the same context when having to recall, for example (2nd mark)/eq; 	
	Weakness	
	 The procedure in learning unrelated words is not an everyday task and so lacks ecological validity/eq; 	
	 There was a lack of control over some of the procedure including lack of standardisation and equipment failure (1st mark) which makes it improbable the study could be replicated and get the same results/eq; (2nd mark) 	
	It's possible that participants who did not have to change	

environments (conditions 1 and 2)were able to rehearse the word list more/eq;	
 The procedure in learning unrelated words using all this technology is not an everyday task and so lacks (mundane) realism/eq; 	
 The sample was small (18) which may not be/is not representative of the population as a whole so cannot be generalised/eq; 	
Look for other reasonable marking points.	

Question Number	Question	
13(a)	As part of the course requirements for cognitive psychology you will have conducted an experiment.	
	State the experimental/alternative hypothesis of your experiment and whether it is directional (one tailed) or non-directional (two tailed).	
	Answer	Mark
	Reject null hypothesis / aims / social practical (surveys) 0 marks	(3 AO3)
	Either no mention of an alternative hypothesis or a very unclear prediction	
	1 mark A basic alternative hypothesis so that the examiner can just about identify what was predicted. Weak IV or DV mentioned.	
	2 marks A clear alternative hypothesis, so that the examiner can identify and understand what was predicted OR a basic alternative hypothesis with direction correctly stated . Both IV and DV are present.	
	3 marks A clear alternative hypothesis so that the examiner can identify and understand what was predicted and has correctly stated its direction. Both IV and DV are present and appropriate to hypothesis - and at least one is operationalised.	
	Look for other reasonable marking points.	

Question Number	Question	
13(b)(i)	Outline one problem you came across when planning and/or carrying out your experiment.	
	Answer	Mark
	If there is more than one problem described mark all and credit the best up to full marks.	(2 AO3)
	No credit for solution of problem or for social practical	
	O marks A muddled answer with no clearly problem outlined. No focus on the experiment being described or no answer at all. Ignore 'Had no time' 'could not find participants'	
	1 mark One appropriate problem given such as experiment may have suffered from demand characteristics or that participants were found using opportunity sampling. Can be an ethical or practical problem including one with the procedure.	
	2 marks Answer clearly outlines one appropriate problem but candidate has also included some elaboration (which relates to (a) such as experiment may have suffered from demand characteristics and the candidate has explained what this means)	
	Look for any other reasonable marking points.	

Question Number	Question	
13(b)(ii)	Explain how you might have addressed (or did address) the problem you outlined in (b)(i) when planning and/or carrying out your experiment.	
	Answer	Mark
	If the problem does not relate to the one given in (b)(i) or (b)(i) is blank/incorrect but a relevant problem with carrying out experiment is addressed max 1 mark.	(2 AO3)
	O marks A muddled answer with no clearly identifiable solution to the problem outlined. No focus on the experiment being described or no answer at all.	
	1 mark One appropriate solution to the problem given in (b) is addressed such as participants would be found using random sampling or how any confounding variables were controlled.	
	2 marks Answer shows a clearly appropriate solution to the problem given in (b) with clear elaboration and explanation	

Question Number	General Instructions
14 - 17	Marking points are indicative, not comprehensive and other points should be credited. In each case consider 'or words to that effect'. Each bullet point is a marking point unless otherwise stated, and each point made by the candidate must be clearly and effectively communicated.

Question Number	Question	
14	Explain why in psychology using a research method that produces quantitative rather than qualitative data might be preferable.	
	Answer	Mark
	If candidate explains why qualitative methods are better than quantitative methods then zero marks. Candidate can gain credit for applying question to their own study (but does not have to). Credit suitable examples	(4 AO3)
	 Easier to analyse than qualitative data because data is in numbers (1st mark); this enables comparisons to be made between groups much more easily (2nd mark)/eq; Produces more objective data than qualitative as involves little or no interpretation/eq; More likely to be tested for reliability which may lead to generalisability to other situations/eq; For example counting words in a memory experiment is more measurable than asking open questions in an interview/eq; Can be collected more quickly than qualitative data as tends to use closed rather than open questions/eq; Look for other reasonable marking points. 	

Question Number	Question	
15(a)	Milgram carried out a number of variations of his original (1963) study of obedience.	
	Describe one of Milgram's variation studies of obedience. You must clearly identify which variation study you are describing.	
	Answer	Mark
	Only credit Milgram's variations. There are a number of variations, the most common answers are given below, however, Milgram did carry out 18 variations, so if in doubt please contact your Team Leader.	(4 AO1)
	Results must have exact figures to get credit.	
	If more than one variation outlined mark all and credit the best. No separate ID mark.	
	Aim(s) Procedure(s) Results Conclusion(s) Each Max 2	
	e.g. teacher forces learner's hand onto shock plate	
	 To see if level of obedience increased or decreased when teacher and learner are in same room/eq; At each incorrect answer the victim was shocked only when the teacher forced his hand on a shock plate/eq At 150 volts, the learner refused to place his hand on the plate, and the experimenter ordered the subject to hold the victim's hand on the plate/eq; Twelve of forty subjects (30 %) forcibly held the victim's hand in place and continued to administer shocks up to the maximum 450 volts/eq; Obedience decreased (in relation to the original experiment) as the subject came into close proximity with the victim/eq; 	
	e.g. rebellious or obedient fellow participants	
	 to test whether rate of obedience is influenced by rebellious or obedient fellow participants/eq; 80 male ps took part in either of two conditions and all were matched for age and occupation with original sample/eq; Condition 1 had two rebellious stooges who refused to carrying on shocking after 210V/eq; Condition 2 had two obedient stooges who gave shocks without protest/eq; In condition 1 50% of real ps refused to carry on past 	

150V/eq;

- Only 6/40 (15%) went to 450V/eq;
- In condition 2 29 ps (72.5%) went to 450V/eq;
- The presence of fellow ps made a difference to rates of obedience and the rebellious stooges had a larger effect on ps than the obedient ones/eq;

e.g. distant authority figure

- To see if it is easier to resist the orders from an authority figure if they are not close by/eq;
- The experimenter instructed and prompted the teacher by telephone from another room/eg;
- Obedience fell to 20.5% and many participants cheated and missed out shocks or gave less voltage than ordered to/eq;
- This shows when the authority figure is close by then obedience is more likely/eq;

e.g. two teacher condition

- Too see whether less personal responsibility increases obedience/eq;
- Participants could instruct an assistant teacher to press the switches/eq;
- The assistant teacher actually delivered the shocks while the senior teacher just read out the word list/eq;
- 95% (compared to 65% in the original study) shocked to the maximum 450 volts/eq;
- This shows how diffusion of responsibility can increase obedience/eq;

e.g. experiment is conducted in downtown Bridgeport / private office

- Participants were led to believe that the experiment was conducted by a private research firm/eq
- This single difference decreased obedience rate from 65% to 47.5%/eg;
- Because private research firms are viewed as less prestigious than certain universities, it is easier under these conditions to abandon the belief in the experimenter's essential decency/eq;

e.g. Using female participants

- To see if level of obedience increased or decreased when using standard procedure with females/eq;
- At 150 volts, 4 participants stopped giving 'shocks'/eq;
- 65% of the participants went up to the highest shock level/eq;
- Refusal was less gradual as participants either stopped 330 or 450 after 150 volts/eg;

This shows that levels of obedience applies to both genders more or less equally/eq;	
Look for other reasonable marking points.	

Question Number	Question			
15(b)	Evaluate any one of Milgram's studies of obedience in terms of methodology. Do not use ethical issues in your answer.			
	Answer	Mark		
	No credit for ethical issues or applications to real life If more than one study evaluated mark all and credit the best • The procedure is easy to replicate as most variations were in a controlled setting which gives the experimenter control over variables/eq; • There were standardised instructions as a control, which aids replicability and so means the study can be tested for reliability/eq; • Lacks validity as the task of 'giving' electric shocks to a stranger is not something people encounter in everyday life/eq; • Procedure may be prone to demand characteristics as participants may have guessed nature of experiment due to cues/eq; • However 80% who were surveyed said they believed the shocks were painful and there were also visible signs of mental anguish, e.g. sweating, these signs cannot be faked/eq; (2 marks) • The main sample was all American and male which makes it difficult to generalise to other cultures and could be	(3 AO2)		
	seen as ethnocentric / androcentric/eq; Look for other reasonable marking points.			

Question	Question		
Number	Describe the suggested out the suggestion		
16	Describe the cue dependent theory of forgetting.		
	Answer		
	Cue dependency can be described as a theory of memory and or forgetting. No credit for Godden and Baddeley study unless used as example for context dependency.	(5 AO1)	
	Max 1 mark each for an example of each type of cue		
	 When cues present at encoding are not present at retrieval then forgetting may occur/eq; Cues (or prompts) are like additional pieces of information that guide us to the information we are seeking a bit like the contents page of a book/eq; These memory cues may be necessary to access information that is available but not accessible/eq; There are two types of cues, one is context which are environmental cues such as your classroom/eq; For example when someone goes upstairs to get something and forgets what it was, they might remember again when they are back downstairs in the same place (context) they first thought about it/eq; Another is state which are cues internal to the person such as being excited or afraid (1st mark)/eq; For example if you learn something when in a relaxed mood but cannot recall it when in a tense mood/eq (2nd mark) Look for other reasonable marking points. 		

Section C

Question	Question		
17	You and a friend are queuing up at the local supermarket when you hear cries of 'Thief! Stop! Help!' and look around to see a man running off with a bag. The next day you and your friend go back to talk to the store manager and find that you recall things differently. Using theories of forgetting and/or memory, explain these differences in your recollections.		
	differences in your recollections. Answer		
	Each marking point must make reference/be linked to stimulus material. Max 2 marks if only one theory used. DO NOT CREDIT descriptions of the studies/theories themselves. Credit when they are used appropriately (e.g. results and conclusions) in answer to the question.	(5 AO2)	
	Concepts, theories and research from cognitive psychology include: Key Issues (flashbulb memory; cognitive interview) Concepts (leading questions, weapon focus, stress and anxiety) Methodology Theories of Memory / Forgetting Terms and concepts can be drawn from (but are not limited to)		
	 e.g. Information processing There may be individual differences in the way witnesses input and process what they see based on schemas which in turn may lead to differences in recall/eq; e.g. Cue dependent Those interviewed in the queue itself will be aided by cues (context and state) and so may recall more detail than 		
	e.g. Displacement In a limited capacity short term memory some details of the event may be displaced by others, causing forgetting of important details and what is displaced will vary from person to person/eq;		
	 e.g. LOP Those who used deeper processing are likely to remember more than those who used shallow processing/eq; 		
	e.g. Multi storeSome may have though about and discussed what they saw (rehearsal) so transferred information into LTM and		

will be more able to recall detail than those who did not transfer information from STM to LTM/eq;

e.g. Interference

 Later learning / experiences may interfere with recall of what they saw (retroactive interference) so those who were more 'active' after the event may recall less than those who were more 'inactive'/eq;

e.g. Demand characteristics

 When being interviewed some may be more prone to saying things they think the manager wants to hear in a wish to please them/eq;

e.g. Use of the cognitive interview

 Others may be able to give much more accurate detail if the manager uses the cognitive interview asking them to recall events from different perspectives or in a different order/eq;

e.g Reconstructive memory

 They were behind a barrier so did not see all the details and therefore confabulated some of their evidence

e.g. Repression

 The event itself might have been quite traumatic for some in the queue which meant they may have tried not to think about it and repressed the memory/eq;

e.g Trace Decay

 Trace decay can explain differences in forgetting in that the trace/engram may decay more quickly for one of the witnesses than other witnesses/eq;

Look for other reasonable marking points.

Question Number	Question		
*18	Milgram developed the agency theory to help explain the high levels of obedience in his studies.		
	Describe Milgram's agency theory and evaluate it as an explanation of obedience.		
	Answer	Mark	
QWC i,ii,iii	Refer to levels at the end of the indicative content.	6 A01 6 A02	
	A01 : Knowledge and understanding of agency theory A02 : Application/evaluation of knowledge and understanding of agency theory. Evaluation should include: Appropriate answers might include the following knowledge points, but this list is not exhaustive.		
	Indicative content		
	Description Only the findings of research are relevant, no credit for description of any Milgram or equivalent study.		
	 We can be in an agentic/autonomous state which may cause moral strain In social situations we become the agent of someone else's will and follow their orders In such circumstances we will do things that we would not normally choose to do This can create moral strain in the individual obeying the order In the autonomous state we are free thinking and able to make our own decision The theory believes we are socialised into an agentic state from a young age E.g. as children we learn to obey our parents and teachers and act as agents following social rules Being an agent of society might have evolved as it avoids conflict and enables smooth running of a society 		
	Evaluation It must be the agency theory that is being evaluated e.g. cannot gain marks by discussing the ethical problems of Milgram's study. However problems with research that undermine its legitimacy can be used if these then show that the theory lacks empirical support.		
	 Supported by Milgram's research when he showed that 65% of ordinary people would obey an authority figure But this study lacks ecological validity as the task of 'giving' electric shocks to a stranger is not something people encounter in everyday life Supported by Hofling's findings on obedience of nurses where 95% (or 21/22) obeyed 		

	 Has application to real life i.e. used to explain the destructive obedience of soldiers during war Does not explain why some individuals obey and others don't (individual differences) Disobedience of some can be explained by their personality (charismatic leadership) so suggesting that the causes of obedience are more complex than the theory suggests 	
Loc	ok for other reasonable marking points	

Level	Mark	Descriptor
		A01: Knowledge and understanding of science and how science
		works
		A02: Application/evaluation of knowledge and understanding of
		science and how science works
	0	No rewardable material
Level 1	1-3 marks	Candidates will produce brief answers , making simple statements showing some relevance to the question. • Description includes attempt at naming both and/or showing
		 basic understanding of one or both of the two states Little or no attempt at the analytical/evaluation demands of the question. Lack of relevant evidence.
		The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. High incidence of syntactical and /or spelling errors.
Level 2	4-6 marks	Description OR evaluation only OR limited attempt at each OR one is in less detail than the other
	marks	 Description includes showing understanding of both types of states. Or one type is well defined with appropriate elaboration and the other is missing.
		 There will be some relevant evaluation though likely to be limited
		Candidates will produce statements with some development in the form of mostly accurate and relevant factual material. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and /or spelling errors are likely to be present.
Level 3	7-9 marks	Candidate has attempted and answered both of the injunctions in the question well .

		 Description includes both types of states defined well with an attempt at some other aspects of the theory. Evaluation is likely to include material from - supporting studies, application, alternative explanations - used appropriately The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and /or spelling errors are likely to be present.
Level 4	10-12 marks	 Candidate has attempted and answered both of the injunctions in the question very well. Description includes both types of states defined well with appropriate elaboration of the theory which may include other aspects of the theory (see indicative content). Evaluation is likely to include a range of material from - supporting studies, application, and alternative explanations - used with detail and clearly explained.
		The skills needed to produce convincing extended writing are in place. Very few syntactical and /or spelling errors may be found. Very good organisation and planning. Given time constraints and limited number of marks, full marks must be given when the answer is reasonably detailed even if not all the information is present.

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Email <u>publication.orders@edexcel.com</u>
Order Code US030809 January 2012

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